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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/680,885	10/07/2003	Geoffrey Frank Deane	INOGN.005A	6432
20995 7590 07/06/2007 KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR IRVINE, CA 92614			EXAMINER PATEL, NIHIR B	
			ART UNIT 3772	PAPER NUMBER
			NOTIFICATION DATE 07/06/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jcartee@kmob.com
eOAPilot@kmob.com

Office Action Summary

Application No.

10/680,885

Applicant(s)

DEANE ET AL.

Examiner

Nihir Patel

Art Unit

3772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04.16.2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-8, 19-21 and 24-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4-8, 19 and 24-26 is/are rejected.
- 7) ☒ Claim(s) 20 and 21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 4.13.2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Allowable Subject Matter

1. The indicated allowability of claims **4-8, 19-21 and 24-26** is withdrawn in view of the newly discovered reference(s). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims **4-6, 8 and 19** are rejected under 35 U.S.C. 102(e) as being anticipated by McCombs et al. (US 6,764,534).
4. **As to claim 4**, McCombs teaches a portable oxygen concentrator that comprises a compressor **24** which compresses a gas, such as air, to provide a feed gas (**see figures 1 and 2; column 3 lines 8-17**); plural adsorbent beds **30 and 32** which receive the feed gas and output a purified gas and a waste gas (**see figures 1, 4, 7 and 8; column 3 lines 18-40**); a battery (**see column 5 lines 1-10**) which supplies power to the compressor; a housing **104 and 106** which comprises an ambient air inlet **21**, an ambient air outlet **30b and 32b**, and plural compartments (**the two compartments are separated by a central chassis 108**), a first of which contains the adsorbent beds and a second of which contains the compressor (**see figures 7 and 8**), the compartments significantly inhibit migration of thermal energy from the second compartment to the first compartment, wherein the housing further comprises a circuitous air passageway

Art Unit: 3772

through which the air is directed to flow, the air passageway having an upstream portion and a downstream portion (**see column 3 lines 15-45**); and an air circulation fan which draws air through the inlet into the first compartment and through the first compartment into the second compartment, the air being exhausted through the outlet (**see column 4 lines 45-65**), wherein the upstream portion of the air passageway is positioned adjacent the first compartment and the downstream portion of the air passageway is positioned adjacent the second compartment (**see figures 7 and 8**).

5. As to **claim 5**, McCombs teaches an apparatus wherein the first compartment contains heat sensitive components including a plurality of valves interconnected to the adsorbent beds and a circuit board having control circuitry which governs the operation of the valves (**see figures 1-8 and column 3 lines 8-17 and 40-55**).

6. As to **claim 6**, McCombs teaches an apparatus wherein air in the downstream portion of the air passageway is substantially inhibited from flowing into the upstream portion (**see column 3 lines 25-40**).

7. As to **claim 8**, McCombs teaches an apparatus wherein the fan is positioned directly above the compressor and produces an air stream directly against the compressor (**see figures 7 and 8**).

8. As to **claim 19**, McCombs teaches a portable oxygen concentrator that comprises a compressor which produces a feed gas (**see figures 1 and 2; column 3 lines 8-17**); plural adsorbent beds connected to receive the feed gas and produce a purified gas and a waste gas from the feed gas (**see column 3 lines 25-40**); a battery (**see column 5 lines 1-10**); a conduit connected to deliver the waste gas to the battery to cool the battery (**see column 5 lines 9-25**);

Art Unit: 3772

and wherein the battery is positioned in a battery compartment, wherein the conduit delivers waste gas to a space between the battery and the battery compartment (see column 5 lines 9-25).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459

(1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claims **7 and 24-26** are rejected under 35 U.S.C. 103(a) as being unpatentable over McCombs et al. (Us 6,764,534).

12. As to **claims 24 and 25**, McCombs substantially discloses a method step comprising providing an oxygen concentrator having an air compressor **24** (see **figures 1 and 2; column 3 lines 8-17**) which supplies compressed air to a PSA unit, the PSA unit comprising plural adsorbent beds **30 and 32** (see **figures 1, 4, 7 and 8; column 3 lines 18-40**) and a plurality of valves which control fluid flow to and from the beds (see **figures 1-8 and column 3 lines 8-17 and 40-55**); generating an air flow through the concentrator by inputting air through an inlet and outputting the air through an outlet, such that the air flows along a flow path through the

concentrator (see column 4 lines 45-65); and exposing the valves to an upstream portion of the flow path and exposing the air compressor to a downstream portion of the flow path, such that the valves are substantially isolated from air that flows through the downstream portion of the flow path, wherein generating an air flow comprises using an air circulation fan 92 to produce an air stream directly against the air compressor (see figures 7 and 8).

The claimed method steps would have been obvious because they would have resulted from the use of the device of McCombs.

13. As to claims 7 and 26, McCombs substantially discloses the claimed invention; see rejection of claims 4 and 24, but does not disclose plurality of sound absorbing baffles positioned along at least a portion of the air passageway. It would have been an obvious matter of design choice to provide plurality of sound absorbing baffles positioned along at least a portion of the air passageway in order to reduce noise level, since the applicant has not disclosed that having plurality of sound absorbing baffles positioned along at least a portion of the air passageway solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with intake resonator as indicated by McCombs (see column 3 lines 10-20).

Allowable Subject Matter

14. Claims 20 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art of record does not teach a battery compartment that is of a thermal sleeve positioned around the battery and wherein the waste gas comprises a nitrogen rich gas.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nihir Patel whose telephone number is (571) 272-4803. The examiner can normally be reached on 7:30 to 4:30 every other Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia Bianco can be reached on (571) 272-4940. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit 3772

Nihir Patel


PATRICIA BIANCO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700

6/25/07

Application/Control Number: 10/680,885

Page 7

Art Unit: 3772